

in.; Sandusky, Ohio, 2.42 in.; Toledo, Ohio, (19th and 20th,) 3.52 in.; 20th, Fort Porter, N. Y., 2.14 in.; 21st, Norfolk, Va., 2.27 in.; Omaha, Neb., 2.14 in.; Cape Henry, Va., 2.28 in.; 22d, Wood's Holl, Mass., 2.63 in.; 25th, New Orleans, La., 2.53 in.; Mt. Sterling, Ill., 2.20 in.; Galveston, Texas, (24th and 25th,) 9.43 in.; Baton Rouge Barracks, La., 2.50 in.; 26th, Norfolk, Va., 1.97 in.; Smithville, N. C., 2.20 in.; 29th, Vicksburg, Miss., 1.94 in.; Baton Rouge Barracks, La., 2.60 in.; 30th, New Orleans, La., 3.52 in.; Indianola, Texas, 3.24 in.; Galveston, Texas, 2.12 in.; most of the smaller rain-falls here noted fell in the course of a few hours.

Large Monthly Rain-falls.—The following stations report large monthly rain-falls: Galveston, 17.39 inches; Alpena, 13.18 in.; Indianola, 11.75 in.; Denison, 10.74 in.; New Haven, 10.09 in.; Pilot Point, 10.42 in.; St. Marks, 10.61 in.; Baton Rouge, 16.75 in.; Quitman, Ga., 18.03 in.; Auburn, N. H., 18.15 in.; White Plains, N. Y., 18.09 in.; Pelham, N. Y., 10.43 in.

Small Monthly Rain-falls.—The following stations report little or no rain during the month: Camp Verle, 0.43 inches; Eagle Pass, 0.35 in.; Edinburg, 0.32 in.; Florence, 0.49 in.; Phoenix, none; Stanwix, none; Tucson, 0.46 in.; Winnemucca, 0.02 in.; Wickenburg, none; Yuma, none; Alcatraz Island, 0.40 in.; Salinas City, 0.12 in.

Droughts.—The distribution of rain, as given on the accompanying chart, shows slight deficiencies of rain to have occurred in the Ohio and St. Lawrence valleys; but no special reports of droughts, as affecting vegetation, have been received, except such notes as are referred to in the chapter on the height of water in rivers.

Floods.—Destructive floods attended the heavy rains, of the first four days of the month, in the East Gulf and Atlantic states, but in general, the excess of rain has served only to keep the streams very high and promote vegetation up to the last days of autumn.

Hail occurred on the 3rd, in Iowa, Mo.; 5th, Neb., N. Y.; 14th N. C.; 20th, Ky., Mo.; 22nd, Me., Mass.; 25th, Me., Tex., 26th, Neb., N. Y.

Snow.—Snow-falls during the month occurred as follows: on the 2nd, Dak.; 4th, Pa.; 5th, Wy. Ty., Wis.; 6th, N. Y., Pa., Wy. Ty., Vt.; 8th, Mich.; 10th, Ind.; 11th, Col.; 12th, Col., Wy. Ty.; 13th, Col., Wy. Ty.; 14th, Dak., Neb., Wy. Ty.; 15th, Wy. Ty., Neb.; 18th, Col., Neb., Wy. Ty.; 19th, Col., Neb., Wy. Ty.; 20th, Wy. Ty.; 21st, Me.; 22nd, Me., Mass., N. H., N. Y., Ohio, R. I.; 23rd, Pa.; 25th, Me., N. Y.; 28th, Me., Wy. Ty.; 27th, Col., Neb.; 28th, Col., Neb., Utah, Wy. Ty.; 29th, Col., Wy. Ty.; 30th, Col., Minn., Wy. Ty.; 31st, Col., Neb., Wy. Ty. At the end of the month snow was one to three inches deep in Utah and Nevada, and four inches deep in Vermont. Two feet of snow had fallen on Pike's Peak at the end of the month, where winter had set in unusually early.

Rainy Days.—The number of days on which rain has fallen as recorded by Signal Service observers ranges as follows: For New England, 15 to 18; Middle Atlantic States, 11 to 18; Lower Lake region, 15 to 19; Tennessee and the Ohio valley, 10 to 15; South Atlantic and East Gulf States, 9 to 15; West Gulf coast, 12 to 18; Upper Mississippi and Lower Missouri valleys, 5 to 13.

Cloudy Days.—The number of cloudy days is reported by volunteer observers as follows: New England, 5 to 14; Middle States, 13 to 19; South Atlantic States, 6 to 10; East Gulf States, 8 to 20; West Gulf States, 12 to 15; Tennessee and the Ohio valley, 6 to 10; Lower Lakes, 10 to 12; Upper Lake region, 13 to 18; the Northwest, 10 to 20.

RELATIVE HUMIDITY.

The average relative humidity for the month ranges about as follows: For New England, 71 to 78; Middle Atlantic States, 70 to 76; South Atlantic States, 63 to 79; East Gulf States, 72 to 79; West Gulf coast, 73 to 81; Western Texas, 54 to 75; Tennessee and the Ohio valley, 65 to 72; Lower Lakes, 68 to 79; Upper Lakes, 69 to 82; Upper Mississippi valley, 70 to 75; Lower Missouri valley, 70 to 74; the California coast, 71 to 74; the Sacramento valley, 42 to 49. High stations report the following average percentages, not corrected for altitude: Cheyenne, 61; Denver, 50; Mt. Washington, 90; Pike's Peak, 66; Salt Lake City, 41; Santa Fe, 48; Winnemucca, 39.

WINDS.

In General.—The prevailing winds at Signal Service stations, are shown by the arrows on Chart No. II, from which it will be seen that they have been southeasterly west of the Lower Mississippi; northerly in the Northwest and Upper Lake region; southerly in the Lower Lake region and Middle States; and northerly in New England, the South Atlantic and East Gulf States.

Total Movements.—The largest total movements for the month, have been, as follows: Barnegat, 10,208 miles; Cape Henry, 10,356; Cape Lookout, 10,814. Cape May, 12,212; Dodge City, 10,078; Indianola,